<table>
<thead>
<tr>
<th>DAY</th>
<th>IDS 3 Learning Targets</th>
<th>IDS 4 Senior Research</th>
<th>IDS 4 Learning Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>MON Oct 15th, 2018</td>
<td>U2 Lesson 3: Encoding B&amp;W Images</td>
<td>Senior Research</td>
<td>Establish the design of your experiment.</td>
</tr>
<tr>
<td>WED Oct 17th, 2018</td>
<td>U2 Lesson 4: Encoding Color Images</td>
<td>Senior Research</td>
<td>Successfully apply for a college scholarship &amp; provide proof of submission.</td>
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<tr>
<td>THURS Oct 18th, 2018</td>
<td>U2 Lesson 5: Lossy vs. Lossless Compression</td>
<td>Senior Research</td>
<td>Establish the design of your experiment.</td>
</tr>
<tr>
<td>FRI Oct 19th, 2018</td>
<td>U2 Lesson 6: Rapid Research Format Showdown</td>
<td>Senior Research Pre-Trials</td>
<td>Create &amp; present a blog to help share the story of your Senior Research.</td>
</tr>
</tbody>
</table>

- **U2 Lesson 3: Encoding B&W Images**
  - Explain how images are encoded with pixel data.
  - Encode a B&W image in binary representing both the pixel data (intensity) and metadata (width, height).

- **U2 Lesson 4: Encoding Color Images**
  - Use the Pixelation Tool to encode small color images with varying bits-per-pixel settings.
  - Explain the color encoding scheme for digital images.

- **U2 Lesson 4: Encoding Color Images**
  - Use the Pixelation Tool to encode an image of the student’s design.
  - Explain the benefits of using hexadecimal numbers for representing long streams of bits.

- **U2 Lesson 5: Lossy vs. Lossless Compression**
  - Explain the difference between lossy and lossless compression.
  - Explain the relative benefits or drawbacks of different file formats, particularly in terms of how they compress information.
  - Explain the difference between open source and licensed software.

- **U2 Lesson 6: Rapid Research Format Showdown**
  - Identify reliable sources of information when doing research.
  - Synthesize information taken from multiple online sources.
  - Create an artifact (video, image, slide, poster, etc.) to communicate information about a computing topic.

- **U2 Lesson 4: Encoding Color Images**
  - Use the Pixelation Tool to encode an image of the student’s design.
  - Explain the benefits of using hexadecimal numbers for representing long streams of bits.

- **Senior Research**
  - UM Visit
  - Problem Statement Due
  - Lawrence Tech Visit
  - College Scholarship #2 Due
  - Lawrence Tech Visit

- **Senior Research**
  - Establish the design of your experiment.

- **Senior Research**
  - Establish the design of your experiment.

- **Senior Research**
  - Establish the design of your experiment.